Requests

date		First Name	Last Name	Closed
9/6/2004		Dharma	Indurthy	☑

request

Lines 51-58 will need to accept 0-10V corresponding to 0-1000 Torr, hence 10 mV/Torr.

date		First Name	Last Name	Closed
10/13/2004		Wally	Kissel	☑

request

Looks good so far. We might consider changing the parameter page display format from 'long' to 'short' for the BPM devices. (i.e. E:HI602) {or are 7 or 8 significant digits a bit unnecessary as a parameter. :-) }

date	First Name	Last Name	Closed
10/14/2004	Bob	Ducar	☑

request

Peter Lucas:
Bob, Apparently the Numi toroids are nearly ready to be connected to the control system. One means of connection is via MADC channel. I don't remember if channels are assigned for this purpose. If not, I'm sure they can be. Aisha Ibrahim will make the connections to whatever locations are assigned, and Alan Wehmann will take care of the database. <Peter> Peter,

Bob Ducar:
Assignments in the attached.

E:TOR101 to MADC #44 Channel 47. Digital signal E:TR101D through a 284 module at CC $70 N15

E:TORTGT to MADC #87 Channel 18. Digital signal E:TRTGTD through a 284 module at CC $E6 N13

Alan, There are several new things in the attached file - especially MADC assignments including the above. Have one detail to get from Sacha and then I will release it to you for posting and action.

date		First Name	Last Name	Closed
11/3/2004		Dharma	Indurthy	☑

request

Hi, Alan. I sent you some scale factors last weekend, but I need to make one addition. On the hadron monitor gas flow only, there needs to be a -.8V offset, so:

Flow = 24.0*(Voltage-.8V)

date		First Name	Last Name	Closed
11/5/2004		Rich	Talaga	☑

request

I would like to re-name the horn flux sensor channels for MADC #88. There are 6 bdot sensors in two horns and the signal from each sensor forms three outputs to ACNET: an integrated bdot waveform (used in fast time plotting), the peak value of the waveform and the integrated value of the waveform. We would like to display all waveforms first, followed by peak values and then the integrated values. Also, we'd like to change the ACNET names and descriptions as in the attachment (highlighted section).

Rich, The changes you request are quite reasonable and more informative. I request Peter/Alan to make the changes. I assume scaling remains as is. I will leave it up to you to correct channels correctly to the analog entry box. I have made the changes in the Controls Requirements document under the MADC tab. Changes are for MADC #88 Channels 32 to 49. I modified your request slightly by adding a "F" to the names for Channels 38 to 43. Hope this is OK with you.

date	First Name	Last Name	Closed
11/6/2004	Dharma	Indurthy	☑

request

We need one more adjustment in the ACNET scale factors for the supply pressure line. The acnet name is E:GASSPLY, and the scale factor should be .635 psi/mV. And as a reminder, there's a .8V offset for E:HMGPR. Please make the changes at your convenience. Thanks.

Added 11/9:
You're right, the name is E:MGSP for the gas supply. Also, I think I gave you an incorrect offset for E:HMGF. The offset should be -33mV.

date	First Name	Last Name	Closed
11/8/2004	Peter	Lucas	☑

request

> Bob, the following devices are listed as inputs to the permit system but do not have database entries:
>
> I:FT6T2 My mistake here on not updating name.

BPS Inputs tab has been updated.

Real name is I:K6FT2 MADC 65 Channel 18 (Thought to be Already Entered)

> E:LMHV6O MADC 44 Channel 28 (Not Entered Yet, But Should Be)
> E:LMHV6R MADC 44 Channel 29 (Not Entered Yet, But Should Be

You may have missed E:LMTSW at MADC 88 Channel 9 that has also not been entered yet but should be.
> E:LMBBBP MADC 79 Channel 19 (Not Entered Yet, But Should Be)
> E:62PEnn This is buried in the LCW PLC at MI-62
> E:LMTGTT MADC 88 Channel 8 (Not Entered Yet, But Should be)

date	First Name	Last Name	Closed
11/8/2004	Sacha	Kopp	☑

request

2) I would like to request 4 new MADC channels in the AAT racks, which could occupy channels 39-42 of the input box. These are RTD temp monitors we intend to stick right on the detectors (most critical for the hadron monitor, which will get warm).
E:HMRTD hadron monitor RTD
E:MM1RTD muon monitor alcove 1 RTD
E:MM2RTD muon monitor alcove 2 RTD
E:MM3RTD muon monitor alcove 3 RTD

Sacha, Your request (#2) for additional channels, after thorough review by management, has been granted. The channels are now listed in the attached Controls Requirements document. I trust Peter or Alan will make DB entries upon your supply of scaling information. Dukes

Added 11/9, from Dharma Indurthy:
Hi, Alan.

Here are scale factors for the new ACNET devices (RTD's) for the MADC channels
39-42 with the following names: HMRTD, MM1RTD, MM2RTD, MM3RTD. Each of them
is scaled as follows:

Temperature(degrees F) = 1000*Voltage(V)

Added 11/11, from Dharma Indurthy:

Unfortunately, an ambiguity in our documentation for our meters

date		First Name	Last Name	Closed
11/9/2004		Dharma	Indurthy	☑

request

You're right, the name is E:MGSP for the gas supply. Also, I think I gave you an incorrect offset for E:HMGF. The offset should be -33mV.

date		First Name	Last Name	Closed
11/10/2004		Bob	Ducar	☑

request

I have noticed an error for the assignment of E:TOR101. It was assigned to Channel 28 of MADC 44 (Analog Entry Box at top of Rack MI60226). This channel was allocated for other purposes. It should be assigned to Channel 47 of the same MADC. (Dallas should check that connection and move to Channel 47.) I have instructed Alan to make the necessary DB change.

date		First Name	Last Name	Closed
11/10/2004		Bob	Ducar	☑

request

Ducar: 11/9, telephone call:
E:TOR101, wrong channel, he will send email
Check entry for E:TORTGT, see if screwed up
E:NHSA, E:NHSB: no readng property?
E:LMHV6O, E:LMHV6R, E:LMBBBP, E:LMTGTT, E:LMTSW loss monitors
E:CPS6NV wrong channel now, Leon has to get to BPS
E:CPS6N
E:CPS6NI get names right
E:CPS65
E:CPS65I

I have noticed an error for the assignment of E:TOR101. It was assigned to Channel 28 of MADC 44 (Analog Entry Box at top of Rack MI60226). This channel was allocated for other purposes. It should be assigned to Channel 47 of the same MADC. (Dallas should check that connection and move to Channel 47.) I have instructed Alan to make the necessary DB change.

I've done these, except for E:NHSA, E:NHSB, where I'm waiting for Steve Hays to indicate any reason why I shouldn't put the reading block in.

E:LMHV6O, E:LMHV6R have the "smell" of gas values, so the scaling is probably wrong. Who can spedify the right values?

Finally, here is a check on what I did for the CPS bulk names:

device descr madc

date	First Name	Last Name	Closed
11/15/2004	Bob	Ducar	☑

request

Some things that remain for new database entries include "orbit verifier" signals and signals down in THSR. The OV signals should be easy to add (if Duane Voy or Peter Prieto have not done so already. They are at MADC 44 Channels 54 to 57 and 59 to 62. Their descriptions are under the MADC tab as usual. I'm sure Peter or Duane could provide the proper scaling. They should be physically hooking up the signals soon.

Signals in THSR are likely more problematical. These are MADC 87 Channels 32 to 46. Hylen or Talaga may be able to help here. Again reference to the right spot under the MADC tab is suggested.

Bob Ducar, 11/23 phone call
MADC 44, 54-57, 59-62, horiz, vert pos, intensity
Duane Voy should know scaling
orbit verificication, BPS inputs

I called Peter Prieto on 11/23 & he said that scaling will be done in "orbit verifier" front end (Duane Voy will put it in, Bob Webber will determine 5th order polynomial for position). I could go ahead and put unit scaling for the MADC output, with units of MM for position and CNTS for intensity.

From Bob, on 11/24: Alan, Yes, I would enter the names in the database with some bogus scaling. This will allow Kent to include in his download for BPS. Dukes

date	First Name	Last Name	Closed
11/15/2004	Wally	Kissel	☐

request

Make sure that the NuMI devices all use SAVE list #123 (NuMI).

12/14/04: I've been conversing with Kent Triplett and he is checking on timing devices. I've given him several lists & he is converting them to save list #123 where appropriate.

After some winnowing I have this list of devices that need to have their save list # changed to save list #123: E:HSLI, E:HSLIP, E:NHSAK, E:NHSASF, E:NHSBK, E:NHSBSF

I have a separate list for the kicker, but I'm unsure about I:KPS62A & I:KPS62B belonging there.

date	First Name	Last Name	Closed
11/19/2004	Rich	Talaga	☑

request

from Rich Talaga: While making cable labels I came across the two horn alignment BLM channels (E:H1ALM, E:H2ALM), which are assigned to twinax MADC inputs. Since we're using a BLM chassis, the output is coax. Can you re-assign MADC 88 channels 50 and 51 to coax inputs? No hurry on this request; I don't anticipate using BLMs until early December, at earliest.

From Bob Ducar: Reassignment granted - to channels 10 and 11 of the same MADC. Alan, could you please make the necessary change?

date		First Name	Last Name	Closed
11/19/2004		Wally	Kissel	☐

request

After giving all the appropriate device their save properties, we should consider building one or more 'family' devices. (see S:165ALL) This is a device that consolidates all the necessary devices. (i.e. saving the family device saves all its members) One might image a device for power supplies, one for timers, ...

date	First Name	Last Name	Closed
11/22/2004	George	Krafczyk	☑

request

George Krafczyk wrote: Could you go into the database and change the error factor gain for all of the 20 KW PEI's. Only two are correct at this time (E:QF117E and E:QD118E). You will notice that Julius has indicated that E:QF121 is incorrect. He means that E:QF121E is the channel that should be 2 amps per volt. Please send us Email so that we can check this out on Tuesday evening.

Just to reiterate C1 parameter should be 2 and the C2 parameter should be 1 as is the case of 17 and 18.

On 11/23 he found out that Steve Hays had done all bur four of the quads. Julius said that the four not done were 107, 119, 120, 121. It is easy enough to check.

date		First Name	Last Name	Closed
11/22/2004		Walter	Jaskierny	☑

request

The cable for the Minos near detector power supply has been terminated at both ends for several weeks. The cable has not been connected at the CAMAC crate or MADC; it was felt that this was best done by the Accelerator controls group. The following is the bit information on the control cable termination at the CAMAC C216 Module.

status bit #0 = P.S. remote control
status bit #1 = interlocks complete
status bit #2 = P.S. on
status bit #3 = ground fault
status bit #4 = D.C. over-current
status bit #5 = magnet over-temperature
status bit #6 = current regulate mode
status bit #7 = external reference
status bit #8 = polarity status

scale factor 1.0 Volt = 500 Amps
0 to 10 Volt reference
0 to 10 Volt readout
In addition the power supply needs the standard momentary open or closed contacts for the Off, On, and Reset functions.

It was decided that there was to be no remote control of the reversing switch. The reversing switch status would be readout by both accelerator controls system and the bdot system.

This is probably on the "NuMI" front end.

date	First Name	Last Name	Closed
11/23/2004	Bob	Ducar	☑

request

From Marv Olsen: Alberto requests a name change for the two permit BLMs. He wants E:LMQ608 and E:LMQ612 changed to I:LMQ608 and I:LMQ612 because he feels that they are MI BLMs rather than Numi's.

Should I make the change or do you want Alan to do it.

Bob Ducar replied: I suggest Alan make the changes. In addition are associated names that go from E to I. These include E:LMHV6O and E:LMHV6R high voltage monitors. Also E:NLMC6R and E:NLMC6H timers (if Kent got around to entering these devices yet). Descriptions should be modified to take out reference to "NuMI" given that "Dep" considers these part of the MI world.

Marv replied back: Yes, the associated parameters should also get changed to "I:"

date		First Name	Last Name	Closed
11/23/2004		Peter	Lucas	☑

request

Left over from record id #5: E:62PEnn This is buried in the LCW PLC at MI-62

date	First Name	Last Name	Closed
11/29/2004	Lyn	Winterowd	☑

request

Date: Mon, 29 Nov 2004 11:30:43 -0600
From: Lin Winterowd <winterowd@fnal.gov>
Subject: Errors
To: "Alan Wehmann (E-mail)" <wehmann@fnal.gov>, "Brian Hendricks (E-mail)" <hendricks@fnal.gov>, "Rich Neswold (E-mail)" <neswold@fnal.gov>
Cc: "Lin Winterowd (E-mail)" <winterowd@fnal.gov>
Reply-to: winterowd@fnal.gov

Gentlemen - we are getting errors on attempts to access the following devices/properties. Would you please check into this? Thanks!

E:HT101D Sett 57 -29 MI3 c00s00 null
E:HT105D Sett 57 -29 MI3 c00s00 null
E:HT107D Sett 57 -29 MI3 c00s00 null
E:HT109D Sett 57 -29 MI3 c00s00 null
E:HT112D Sett 57 -29 MI3 c00s00 null
E:HT114D Sett 57 -29 MI3 c00s00 null
E:HT115D Sett 57 -29 MI3 c00s00 null
E:HT117D Sett 57 -29 MI3 c00s00 null
E:HT119D Sett 57 -29 MI3 c00s00 null
E:HT121D Sett 57 -29 MI3 c00s00 null
E:VT103D Sett 57 -29 MI3 c00s00 null
E:VT106D Sett 57 -29 MI3 c00s00 null
E:VT108D Sett 57 -29 MI3 c00s00 null

date	First Name	Last Name	Closed
11/30/2004	Bob	Ducar	☑

request

Alan,

I have pulled cables in Pre-Target and Lower Hobbit for Gordon's temperature sensors. Given Dan's schedule, I would not expect these to actually be hooked up for a while yet. I have given the eight channels names and descriptions that can be found in the attached file. Specifically, they are assigned to MADC #88 Channels 19 to 26 in the Target Hall PS Support Room. Rack space is reserved for Dan's chassis.
Please enter these in the DB. Dan can provide scaling info.

On 12/14 Dan Schoo wrote (in response to my query):

They are a special ten channel RTD thermometer chassis.
The scale factor is 10 (0 to 10 volts = 0 to 100 degrees C)

The channel assignments for the MUX are:
Support Room MUX #88

Channel	Device	ACNET Name
19	Q113D*	E:TQD113
20	Q114F	E:TQF114
21	Q117F*	E:TQF117
22	H117*	E:TH117
23	Q118D	E:TQD118
24	Q120D	E:TQD120

date	First Name	Last Name	Closed
11/30/2004	George	Krafczyk	☑

request

Alan,

Of course I forgot to get this information to you yesterday afternoon.

1. Change the DC ON/OFF status word from OK to ON.

2. Remove the digital status line that reads Magnet Over Temperature and replace it with periods as place holders. Remove the words of Hot and OK from this status bit.

3. Change the text of Safety System to read ESS / Magnet Over Temp (as always periods should finish a line to guide the eye to the status bit).

4. Enable the digital alarm block that will allow us to change the good status words to Green and the bad status to Red among other things.

I have attached two gif's that give you QF112's Status page as modified by Steve Hays and QD111's status page before modification.

George

date		First Name	Last Name	Closed
11/30/2004		Bob	Ducar	☑

request

Investigate things like I:LAM60 and I:LAM60F, where the reading scaling formula is different. One uses 3200 and C1=10, the other uses 3276.8 and C1=102.4255. Usual MADC is full scale 10.24. Product of 10.24 and 3200 is 32768. Ratio of 3276.8/102.4255 is 31.99203.

I talked to Bob Ducar and Kent Triplett about this on 12/1/04, after the run plan meeting. Kent volunteered to ask Steve Hays why it was set up this way.

On 12/10/04 I talked to Steve Hays about this. There is no particular reason that this was done.

date	First Name	Last Name	Closed
12/2/2004	Marv	Olsen	☑

request

Date: Thu, 02 Dec 2004 08:29:25 -0600
From: Marvin Olson <Molson@fnal.gov>
Subject: Numi permit BLMs
To: Bob Ducar <ducar@fnal.gov>

I found an error in the data base entries for the two permit BLMs
I:LMQ608 and I:LMQ612.

These two BLMs are true integrators and not lossy log integrators as the rest of Numi's BLMs. Therefore they need to be scaled differently than the others. They should be scaled the same as for example I:66BLMA.

Alan, would you make these corrections.

Also the timing for these are different than the rest of the BLMs.
Alberto, what was the timing plan for these.

I got to thinking and rethinking about the permit BLMs and finally had to go out to MI60 and look at the hardware. The permit BLMs have a true integrator with a modified input for faster response.

So my first message was correct and this is true. These two BLMs are true integrators and not lossy log integrators as the rest of Numi's BLMs. Therefore they need to be scaled differently than the others. They should be scaled the same as for example I:66BLMA. Alan, would you make these corrections.

date		First Name	Last Name	Closed
12/8/2004		Rich	Talaga	☑

request

Hi Alan,

Would you please change the scale factor for MADC 88 Channels 10 and 11 (E:H1ALM and E:H2ALM) from the present configuration x = FLOAT(input)/3200 and x' = c2 * 10^(x/c1) to the following: primary units X = input (index 22) and common units X' = X (index 0).

Thanks,

Rich

This was settled by choosing index 0 for both transformations (thus 10 volts reads 10 volts)

date	First Name	Last Name	Closed
12/9/2004	Bob	Ducar	☐

request

Alan et al,

With the intent of removing the 3rd "C" power supply from the E:HV101 system, there are a couple of analog signals that should be deleted from the database. I trust the cables will be removed by the PS guys.

MADC #38, Analog Entry Box at top of Rack MI60219
Channel 18 E:HV01CF
Channel 26 E:HV01CU

Thanks, Dukes

date	First Name	Last Name	Closed
12/15/2004	Kent	Triplett	☐

request

There is another device that we should probably worry about. It is E:HSLI, the Horn Stripline Current readback that is monitored by the 204 module named "THA". E:HSLI reading is via channel 0 of MADC87 MI3 crate $E6. Page 12 of Duke's Golden File shows that this device has an anticipated nominal of 200,000 Amps. Due to the scaling used for this device, this nominal is very near the top of the defined range. It is close enough that when a conversion is made for the 204 input (+/- 10.0V), 200,000A exceeds the maximum value of the range. So, left as is, the 204 will not be able to monitor this input. Perhaps we can come up with a solution.

12/15: I sent this as well to Rich Talaga and Jim Hylen.